

**Delivering
Essential Information Literacy
Learning to
All Students**

**Big6™ by the Month
November**

Information Seeking Strategies



Mike Eisenberg



Janet Murray

The Team!



Sue Wurster



Colet Bartow

Agenda

Brief review of *Big6™ by the Month*
Defined: ISS Power Objectives
Predictable: Lesson Ideas
Measured: Assessment
Reported: Options for each audience



Big6™ by the Month

Comprehensive information literacy
that is:

- Defined
- Predictable
- Measured
- Reported

Implementing Big6™ by the Month

DEFINED: For each month, determine 2-4-8 *power Grade Level Objectives* based on the designated *Big6/Super3* stages.

PREDICTABLE: adopt, and adapt the *Big6 by the Month* schedule to your own school setting and calendar.

For each month, link to classroom/subject areas:
if available, use existing curriculum or curriculum mapping info.
if necessary, conduct *Assignment Mapping*.

For each week, develop instructional lessons based on *Grade Level Objectives* linked to *classroom assignments*.

MEASURED: For each month, develop *Big6/Super3 Assessment* (approach, evidence, criteria) based on *Grade Level Objectives* and linked to classroom assignments.

REPORTED: Determine audience and means of *reporting* to that audience document and communicate performance.

Big6™ by the Month

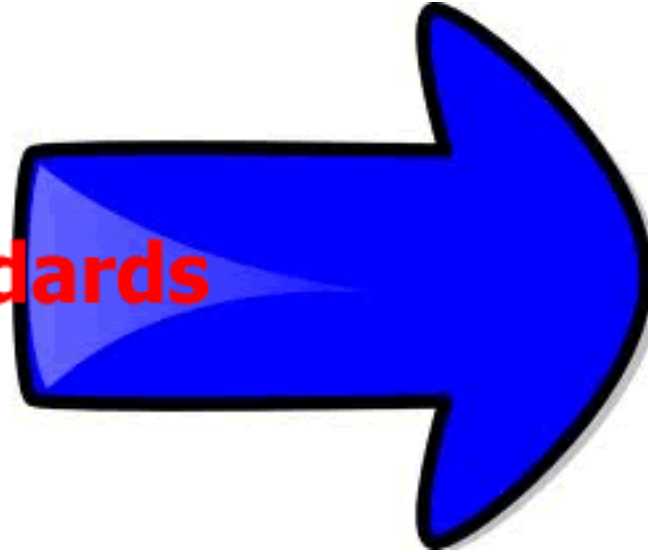


Comprehensive information literacy that is:

- ✓ **Defined**
- ✓ Predictable
- ✓ Measured
- ✓ Reported



Standards



**Grade
Level
Objectives**



Information Seeking Strategies



ICT Literacy Standards	
AASL	1.1.4 Find, evaluate , and select appropriate sources to answer questions. 1.1.5 Evaluate information found in selected sources on the basis of accuracy, validity, appropriateness for needs , importance, and social and cultural context.
ACRL	1.2 identifies a variety of types and formats of potential sources for information. 3.2 articulates and applies initial criteria for evaluating both the information and its sources .
TRAILS	2. Identify potential sources. 4. Evaluate sources and information .
ISTE NETS	3c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks.

Big6 by the Month (2012). Compiled by Janet Murray from "AASL Standards for the 21st-Century Learner." © 2007. American Association of School Librarians. <<http://www.ala.org/aasl/standards>>;

"Information Literacy Competency Standards for Higher Education." © 2000. Association of College and Research Libraries.

<<http://www.ala.org/ala/mgrps/divs/acrl/standards/informationliteracycompetency.cfm>>;

TRAILS: Tools for Real-Time Assessment of Information Literacy Skills <<http://www.trails-9.org>>; and

ISTE. *National Educational Technology Standards (NETS-S) for Students*. The Big6 is © Michael B. Eisenberg and Robert E. Berkowitz. Big6 Associates, LLC. www.big6.com

Information Seeking Strategies

2.1 Determine all possible sources.



Related Common Core Standards	
Reading: Informational Text	6. Determine an author's point of view or purpose in a text and explain how it is conveyed in the text.
Writing	8. Gather relevant information from multiple print and digital sources , ...
Mathematical Practices	1. Make sense of problems and persevere in solving them: ... use concrete objects or pictures to help conceptualize and solve a problem



Information Seeking Strategies

2.2 Select the best sources.

Related Common Core Standards	
Reading: Informational Text	8. Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.
Reading: History and Social Studies	6. Identify aspects of a text that reveal an author's point of view or purpose (e.g., loaded language, inclusion or avoidance of particular facts). 8. Distinguish among fact , opinion , and reasoned judgment in a text.
Writing	8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, ...
Mathematical Practices	3. Construct viable arguments and critique the reasoning of others: ...distinguish correct logic or reasoning from that which is flawed

Information Seeking Strategies



Look at **your** state's content standards:

<http://www.educationworld.com/standards/state/index.shtml>

and/or the Common Core corestandards.org

Can you find standards related to information seeking strategies?

2.1 Determine all possible sources

2.2 Select the best sources



Information Seeking Strategies

2.1 Determine all possible sources.

Look at **your** state's content standards: <http://www.educationworld.com/standards/state/index.shtml> and/or corestandards.org. Fill in standards related to information seeking strategies.

Related Content Standards from the state of _____	
Language Arts	
Social Studies	
Science	
Other:	
Information Literacy	

Information Seeking Strategies

2.2 Select the best sources.



Look at **your** state's content standards: <http://www.educationworld.com/standards/state/index.shtml> and/or corestandards.org. Fill in standards related to information seeking strategies.

Related Content Standards from the state of _____	
Language Arts	
Social Studies	
Science	
Other:	
Information Literacy	

Month: November

Big6 Stage: Information Seeking Strategies

Grade Level Objectives	Grades						
	Cross-Grade Objective	K	1	2	3	4	5
	1.2 Determine the resources needed.	A. Explore possible resources [#]	A. Discuss possible resources [#]	A. Discuss possible resources [#]	A. Discuss and identify possible resources [#]	A. Construct a list of possible resources [*]	A. List possible resources [*]
	1.3 Choose from a range of resources .	A. Explore possible resources [#]	A. Choose resources from a limited selection	A. Choose resources from a limited selection	A. Determine relevant resources	A. Construct a list of possible resources [*]	
	1.3 BM 8 Evaluate and select appropriate resources: currency (BM=Benchmark)						A. Identify the copyright date to determine the currency of resources
	1.3 BM 8 Evaluate and select appropriate resources: point of view						B. Identify point of view in resources
	1.3 BM 8 Evaluate and select appropriate resources: usefulness						C. Identify and select useful resources

[#] print, nonprint, digital, community resources

^{*} e.g. reference materials, newspapers, age appropriate Web sites, nonfiction books, personal interviews, audio files, video files, community resources, data bases

Compiled by Janet Murray from Essential Learning Expectations for Information Literacy

http://www.opi.mt.gov/pdf/Standards/10FebELE_LibMedia.xls

Big6 by the Month (2012). The Big6 is © Michael B. Eisenberg and Robert E. Berkowitz. Big6 Associates, LLC. www.big6.com

Month: November**Big6 Stage: Information Seeking Strategies**

Grade Level Objectives	Grades					
	Cross-Grade Objective	6	7	8	9-10	11-12
	1.3 BM 8 Evaluate and select appropriate resources: currency (BM=Benchmark)	A. Determine the currency of resources	A. Identify appropriately current resources	A. Identify appropriately current resources		
	1.3 BM 8 Evaluate and select appropriate resources: point of view	B. Identify point of view in resources	B. Identify point of view and bias in resources	B. Identify point of view and bias in resources		
	1.3 BM 8 Evaluate and select appropriate resources: usefulness	C. Judge authority and usefulness of resources	C. Appraise authority and usefulness of resources	C. Appraise validity, authority and usefulness of resources		
	1.3 D Select the best resources	D. Select the best resources	D. Select the best resources	D. Select the best resources	A. Identify accurate information (RADCAB*)	A. Interpret information for RADCAB*
	1.3 BM 12 Evaluate and select appropriate resources				B. Evaluate all selected topic-related resources based on task criteria	B. Compare and contrast all selected topic-related resources based on task criteria
	1.3 BM 12 Evaluate and select appropriate resources				C. Distinguish between and incorporate appropriate primary/secondary sources	C. Incorporate primary and/or secondary sources appropriately

*RADCAB = Relevance, Appropriateness, Detail, Currency, Authority, Bias

Month:

Big6 Stage:

GRADES

Cross-Grade
Objective

Grade Level Objectives



Big6™ by the Month

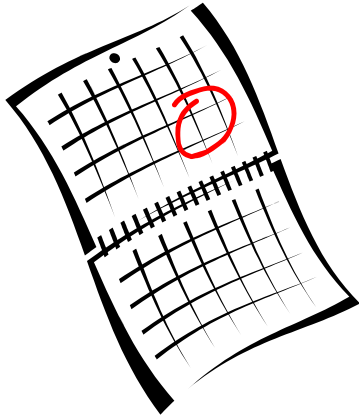
Comprehensive information literacy that is:

✓ Defined

✓ ***Predictable***

✓ Measured

✓ Reported



Big6 by the Month **2012-2013**



Sept: Overview of the
process

Oct: Task Definition

Nov: Info Seeking
Strategies

Dec: Location &
Access

Jan: Use of Info

Feb: Revisit and
Reflect

Mar: Synthesis

Apr: Evaluation

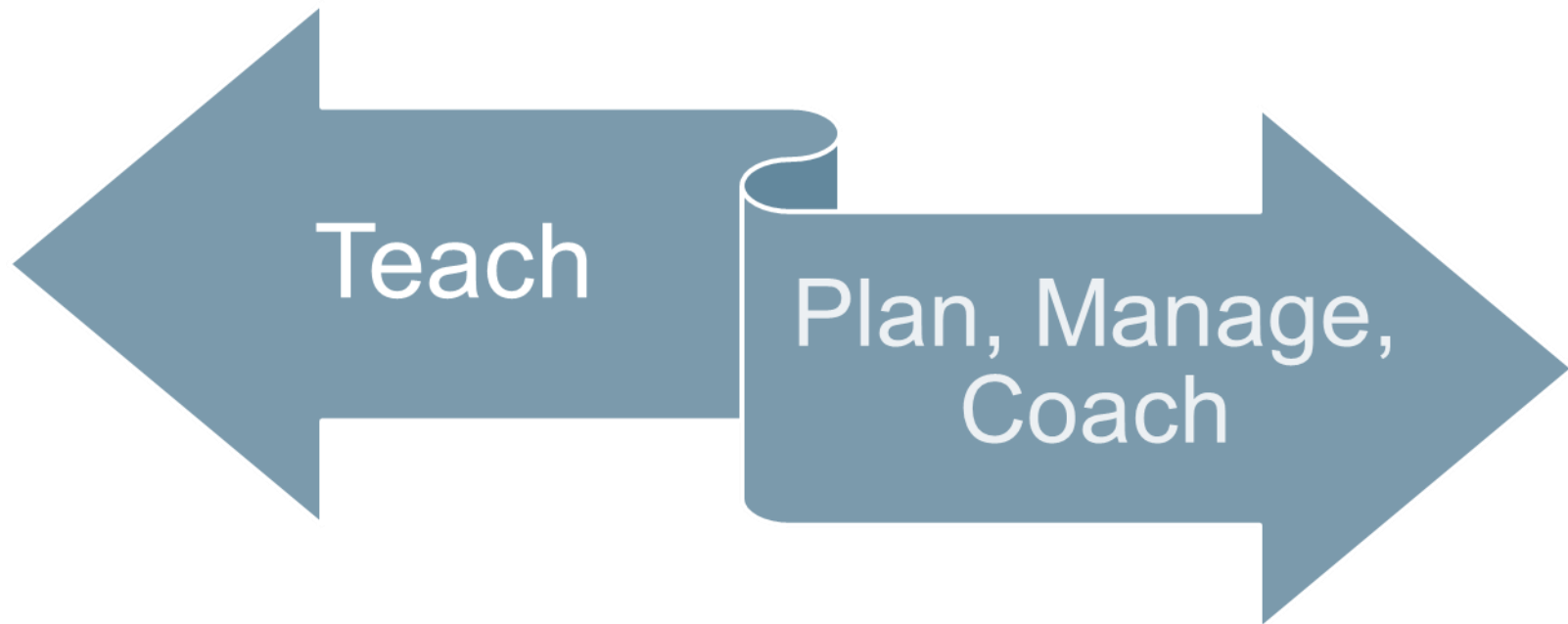
May: Culminating
Activities



- ✓ When is "research" taught?
- ✓ Who teaches "research" skills?

✓Predictable

Roles in Info & Tech Skills Instruction





Information Seeking Strategies



Lesson Ideas

Predictable – Planning Actions

- Connect to classrooms, subject areas, assignments.
 1. Identify 1-2 major assignments by grade/teacher.
 2. Develop ISS lessons targeted to the assignments.

Sample Assignments & Big6 Grade Level Objectives

Grade 2: Science Unit: Simple machines

- Students will create a labeled diagram of a simple machine (lever, inclined plane, pulley) and will compose 1 paragraph on how the machine has helped in their life.
- **Power Big6 GL Objective: Determine possible resources to use.**

Grade 9/10: Social Studies/World History WWI and WWII

- Students will compose 5-7 journal entries (one page each) from the perspective of a person living during WWI or WWII and will discuss how technology or practices (poison gas, trench warfare, machine guns, airplanes, submarines, and tanks) affected them.
- **Power Big6 GL Objective: Evaluate and select appropriate resources**

November Lesson in Context Big6: Information Seeking Strategies

Big6 Stage: Information Seeking Strategies- 2.1 Determine all Possible Sources

Grade Level: Second Grade

GL Objective: Determine the resources needed

Subject Area: Science

Unit Focus: Simple Machines

Subject Area Lesson Goal:

Students will create a labeled diagram of a simple machine (lever, inclined plane, pulley) and will compose 1 paragraph on how the machine has helped in their life.

Learning Activity:

1. The whole class will create post-it notes of all possible sources to use for this assignment.
2. The post-its will be grouped by type (print, non-print, digital, people).
3. The groupings will be displayed in the classroom and students may add to them throughout the duration of the assignment.

Assessment:

- Evidence: Post-it notes displayed in the classroom.
- Criteria: Each child contributes at least 3 possible source ideas (post-it notes).

Novice	Nearing Proficient	Proficient	Advanced
A. Identifies random resources from a limited selection	A. identifies a minimal number of resources from a limited selection	A. identifies resources from a limited selection	A. identifies relevant resources from a limited selection

November Lesson in Context Big6: Information Seeking Strategies

Big6 Stage: Information Seeking Strategies- 2.2 Select the Best Sources

Grade Level: Grades 9/10

GL Objective: 1.3 BM 12 Evaluate and select appropriate resources

Subject Area: World History

Unit Focus: World War I and World War II

Subject Area Lesson Goal:

Students will compose 5-7 journal entries (one page each) from the perspective of a person living during WWI or WWII and will discuss how technology or practices (poison gas, trench warfare, machine guns, airplanes, submarines, and tanks) affected them.

Learning Activity:

1. Students will work in groups to create a list of *all* possible sources (print, non-print, digital, community) to help with their assignment.
2. Students will work individually to select at least 3 sources to use for their assignment and will explain (in 2-3 sentences) *why* they chose that particular source – focusing on relevance and credibility.

Assessment:

- Evidence: Individuals select at least 3 sources.
- Criteria: At least 3 sources (2 different types) are selected AND the students explain why (logically & accurately) they selected the sources e.g., topical, current, trustworthy, precise, etc.).

Novice	Nearing Proficient	Proficient	Advanced
E. selects minimal relevant resources without explanation	E. selects some resources to solve the problem with incomplete explanation	E. selects and justifies appropriate resources to solve the problem	E. selects and justifies unique resources to solve the problem

Developed by Laura Robinson, 2010; Assessment by Colet Bartow, 2011

Information Seeking Strategies



2.1 Determine all possible sources.

2.2 Select the best sources.

- What are **all** the possible sources?
 - Books
 - Periodical databases
 - Interviews
- What are the **best** sources?
 - Reliable (is the information true?)
 - Authoritative (who's the author?)
 - Current (date of update? Does it matter?)
 - Objective (point of view, bias)
 - Relevance (appropriateness to topic)

Use a subject directory



ipl2 For Kids

INFORMATION YOU CAN TRUST

Search: For Kids [Search Help](#)

Have a question?
Ask an **ipl2** Librarian

 Reference Homework Help Dictionaries Encyclopedias more...	 Our World History Religion more...	 Computers & Internet Search Engines Online Games more...	 U.S. Presidents  Stately Knowledge  Science Fair  Say Hello  Story Hour  Culture Quest  Author Page  Learning HTML  Poison Prevention  Orca Search
 Health & Nutrition The Body The Mind more...	 Reading Zone Books Short Stories more...	 Math & Science Animals Physics and Chemistry more...	
 Art & Music Architecture Museums more...	 Sports & Recreation Football Dance more...	 Fun Stuff Arts & Crafts Games more...	

 **Resources for Parents & Teachers**

<http://www.ipl.org/div/kidspace/>

Evaluate web pages

Part 1: Looking at and using the page	YES	NO
As you look at the questions below, put an X in the <i>yes</i> or <i>no</i> column for each.		
Does the page take a long time to load?		
Are the pictures on the page helpful?		
Is each section of the page labeled with a heading?		
Did the author sign his/her real name?		
Did the author give you his/her e-mail address?		
Is there a date on the page that tells you when it was last updated?		
Is there an image map (big picture with links) on the page?		
Is there a table (columns of text) on the page? (Check the source code.)		
If so, is the table readable with your browser?		
If you go to another page on the site, can you get back to the main page?		
Are there photographs on the page?		
• If so, can you be sure that photographs have not been changed by the author?		
• If you're not sure, should you accept the photos as true?		

Summary of Part One

Using the data you have collected above, write a paragraph explaining why you would or wouldn't recommend this site to a friend for use with a project.

<http://kathyschrock.net/eval/pdfs/evalmidd.pdf>



Big6™ by the Month

Comprehensive information literacy that is:

- ✓ Defined
- ✓ Predictable
- ✓ ***Measured***
- ✓ Reported



✓ How do you currently assess and report "research" skills?

✓ **Measured**

“a knowledge assessment with multiple-choice questions targeting a variety of information literacy skills based on 3rd, 6th, 9th, and 12th grade standards.”

www.trails-9.org/

TRAILS Categories & Big6™



TRAILS Tool for Real-time
ASSESSMENT of INFORMATION LITERACY Skills

HOME

ABOUT TRAILS

HOW TRAILS WORKS

Steps to Using
TRAILS

Ideas for Using
TRAILS

Sample Items

Categories

MY ACCOUNT

FAQs

Related Resources

CONTACT US

Categories

1. Develop topic

Develop focus. Recognize the hierarchical relationships of broader and narrower topics. Identify individuals to help you focus a topic. Identify manageable topics based on the parameters of an assignment.

2. Identify potential sources

Understand the types of containers in which information is housed (ex: different types of libraries, books, databases, online catalogs, primary sources, etc.) and the types of information that can be found within each type of container. Understand the roles and limitations of differing types of information sources (encyclopedias, atlases, dictionaries, etc.) and finding tools (research databases, online catalogs, bibliographic citations, people, etc.). Select the most productive information sources and finding tools to address a given information need.

3. Develop, use, and revise search strategies

Understand how to use a given type of information container in order to retrieve information (ex: index and table of contents in a book, an online catalog, etc.). Select search terms. Develop a search strategy for the topic appropriate to a given finding tool. Understand how to use Boolean operators. Revise search strategies when too few, too many, or irrelevant results are returned.

4. Evaluate sources and information

Recognize bias. Differentiate between fact and opinion. Determine the accuracy, authority, coverage, currency, and relevancy of information and/or information sources.

5. Recognize how to use information responsibly, ethically, and legally

Recognize how to paraphrase correctly. Understand the concept of intellectual property (especially copyright, fair use, and plagiarism). Understand the concept of intellectual freedom. Create bibliographies and parenthetical citations according to an appropriate style manual.



1. Task Definition

2. Information Seeking
Strategies

3. Location & Access

4. Use of Information

5. Synthesis

6. Evaluation

Information Seeking Strategies



2.1 Determine all possible sources

2.2 Select the best sources

Novice	Nearing Proficient	Proficient	Advanced
Struggle to identify information as accurate	Sometimes identify information as accurate	Identify accurate information	Discriminate the accuracy of information
Evaluate few topic-related resources	Evaluate some topic-related resources based on task criteria	Evaluate all topic-related resources based on task criteria	Determine the applicability of all topic-related resources to the task criteria
Distinguish between and rarely incorporate both primary and secondary sources	Distinguish between and sometimes incorporate appropriate primary/secondary sources	Distinguish between and incorporate appropriate primary/secondary sources	Creatively incorporate appropriate primary/secondary sources
Reevaluate the problems and resources, refine with limited success	Sometimes reevaluate the problems and resources, refine if needed	Reevaluate the problems and resources, refine if needed	Reevaluate/refine the problem and appropriate resources proactively
Select minimal relevant resources	Select some resources to solve the problem	Select appropriate resources to solve the problem	Select unique resources to solve the problem



Big6™ by the Month

Comprehensive information literacy that is:

- ✓ Defined
- ✓ Predictable
- ✓ Measured
- ✓ ***Reported***

REPORT CARD		GRADING PERIOD			
		1	2	3	4
READING		A			
WRITTEN COMMUNICATION		A			
MATHEMATICS		C			
SCIENCE/HEALTH		B			
SOCIAL STUDIES		B			
ART		A			
MUSIC		A			
PHYSICAL EDUCATION		C			
INFORMATION LITERACY		B			
Grade Average		B			
Attendance:		48			
Present		0			
Absent		1			
Tardy					
A = Excellent • B = Good • C = Satisfactory • N = Needs Improvement U = Unsatisfactory • I = Insufficient / Incomplete					
Student: _____					
Grade: _____ Year: _____					

Reported


Audience

✓ *Students*

Options

☐ Observation Record

- Evidence: Individuals select at least 3 sources.
- Criteria: At least 3 sources (2 different types) are selected AND the students explain why (logically & accurately) they selected the sources e.g., topical, current, trustworthy, precise, etc.).

Name: Helen		Date	Assignment
Novice	Nearing Proficient	Proficient	Advanced
E. selects minimal relevant resources without explanation	E. selects some resources to solve the problem with incomplete explanation 	E. selects and justifies appropriate resources to solve the problem	E. selects and justifies unique resources to solve the problem

Notes:

3 similar resources selected that were appropriate to the assignment, but did not give explanation for each of the 3 resources— Please use complete sentences and give at least one specific reason for selecting. Let's review topical, current, trustworthy, precise as possible reasons for selection. Mrs. B

Sample Message for November

Dear Parents/Guardians:

During the month of October, your student will be working on a variety of projects and assignments. As part of each project, we will be focusing on Stage 2 of the Big Six information problem solving model. You can help reinforce these skills by asking them questions that relate to:

- 2.1 Determining all possible sources.
- 2.2 Selecting the best sources.

The chart in this message details the skills students will practice and some questions you can ask to help students be successful as they complete assignments and projects.

Please contact me if you have any questions.

Sincerely,
Mrs. Bartow

4 th Grade Students will be able to:	Questions to Ask
construct a list of possible resources	Have you thought about different types of resources? Examples of resources might include: reference materials, newspapers, Web sites, nonfiction books, personal interviews, audio files, video files, community resources, magazine search engines
determine relevant resources to solve the problem or task	How do you know that the resources you have chosen are the best?

November is ... Information Seeking Strategies Month



		Picture Day				
				Thanksgiving Holiday		

- 2.1 Determine all possible sources
- 2.2 Select the best sources

How you report is as important as what you are reporting.

REPORT CARD				
GRADING PERIOD	1	2	3	4
READING	A			
WRITTEN COMMUNICATION	A			
MATHEMATICS	C			
SCIENCE/HEALTH	B			
SOCIAL STUDIES	B			
ART	A			
MUSIC	A			
PHYSICAL EDUCATION	C			
Grade Average	B			
Attendance:				
Present	48			
Absent	0			
Tardy	1			
A = Excellent • B = Good • C = Satisfactory • N = Needs Improvement U = Unsatisfactory • I = Insufficient / Incomplete				
Student: _____ Grade: _____ Year: _____				

Do your current reporting methods clearly communicate

- criteria for success?
- evidence of learning?
- current status?



Participate:

Google Site

<http://sites.google.com/site/big6xthemonth>

Google Discussion Group

<http://groups.google.com/group/b6month>

Big6 by the Month

SEPTEMBER - Overview
OCTOBER - Task Definition
NOVEMBER - Information
Seeking Strategies
DECEMBER - Location &
Access
JANUARY - Use of
Information
FEBRUARY - Revisit and
Reflect
MARCH - Synthesis
APRIL - Evaluation
MAY - Culminating Activities

The Team

News & Posts

Files

Benchmark Dates

Sitemap

Join Our Discussions





Useful Links

Big6™ Stage 2: Information Seeking Strategies

The Big 6 Associates, LLC <http://www.big6.com>

“Evaluate Your Sources: Print and Website” checklists by Marley Winningham.

http://big6.com/media/freestuff/Marley_Big6_article2.pdf

“Know Your Information Sources” Graphic and Quiz by Susan McMullen

<http://big6.com/media/freestuff/know-your-info-sources.gif>

<http://big6.com/media/freestuff/McMullenHandout1.pdf>

“Kathy Schrock’s Guide to Everything” is an exceptional resource for educators using technology in the classroom. <http://www.schrockguide.net/index.html>

Use a **subject directory** of evaluated resources which organizes information hierarchically:

The Internet Public Library For Kids <http://www.ipl.org/div/kidspage/>

has an adult version also <http://www.ipl.org/div/subject/>

KidsClick <http://kidsclick.org>

Multnomah County Library Homework Center <http://www.multcolib.org/homework/>

Evaluate web sites:

“Critical Evaluation Information” by Kathy Schrock

<http://www.schrockguide.net/critical-evaluation.html>

“Thinking About World Wide Web Pages” by Janet Murray

<http://janetsinfo.com/webeval1.html>